Root Keys:

- `"info"`: Provides important metadata about the dataset and github related to it.
  - Description
  - Url
  - Version
  - Year
  - Contributor
  - Date_Created
- `"licenses"`: Contains licensing information
  - License ID
  - Name of License
  - URL for License
- `"images"`: Lists details about the images in the dataset.
  - License ID
  - Image ID - Image ID associated with respective file name of image
  - File name ("file_name") - Name of the file (jpeg, png, etc.)
  - Dimensions - "width", "height"
  - Background ("background") - Integer (Need to look into this)
- `"annotations"`: Contains information on the annotations itself.
  - Annotation ID
  - Image ID ("image_id")- Identifies image from images key containing data for images
  - Category ID ("category_id") - Identifies the animal category and type using the category key
  - Bounding Boxes ("bbox") - list([x, y, w, h]); x, y, width, height,
  - area - Segmentation area (integer usually)
  - IsCrowd - Flag for whether picture is a crowd of animals or not
  - num_keypoints - Number of labeled key points total (Up to 17)
  - Key points - list([x, y, v]); x, y, v (**v=0 not labeled, v=1: labeled but not visible, and v=2: labeled and visible**)
- `"categories"` : Describes categories or classes of objects/animals within the dataset.
  - Category ID ("id") - ID to identify type of animal in annotations
  - Animal Name - Type of animal inside image (eg. Antelope)
  - Super Category - Type of animal (eg. Bovidae)
  - Key Points - What the keypoints are called and indexing for the annotations
  - Skeleton - Defines connectivity via a list of keypoint edge pairs (from the list above) used for visualization

Example:

AP-10K

- dict_keys(['info', 'licenses', 'images', 'annotations', 'categories'])
- data['info'] {'description': 'AP-10k', 'url': 'https://github.com/AlexTheBad/AP-10K', 'version': '1.0', 'year': 2021, 'contributor': 'AP-10k Team', 'date_created': '2021/07/01'}
- data['images'][0] {'license': 1, 'id': 102, 'file_name': '000000000102.jpg', 'width': 1024, 'height': 681, 'background': 5}
- data['annotations'][0] {'id': 114, 'image_id': 102, 'category_id': 1, 'bbox': [424, 205, 552, 456], 'area': 251712, 'iscrowd': 0, 'num_keypoints': 10, 'keypoints': [885, 355, 2, 810, 361, 2, 843, 412, 2, 864, 529, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 729, 571, 2, 822, 604, 2, 678, 619, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 590, 473, 2, 456, 622, 2, 549, 631, 2]}
- data['categories'][0] {'id': 1, 'name': 'antelope', 'supercategory': 'Bovidae', 'keypoints': ['left_eye', 'right_eye', 'nose', 'neck', 'root_of_tail', 'left_shoulder', 'left_elbow', 'left_front_paw', 'right_shoulder', 'right_elbow', 'right_front_paw', 'left_hip', 'left_knee', 'left_back_paw', 'right_hip', 'right_knee', 'right_back_paw'], 'skeleton': [[1, 2], [1, 3], [2, 3], [3, 4], [4, 5], [4, 6], [6, 7], [7, 8], [4, 9], [9, 10], [10, 11], [5, 12], [12, 13], [13, 14], [5, 15], [15, 16], [16, 17]]}

Sources:
https://github.com/facebookresearch/Detectron/issues/640
https://github.com/jin-s13/COCO-WholeBody/blob/master/data_format.md
https://github.com/cocodataset/cocoapi/issues/36
https://www.v7labs.com/blog/coco-dataset-guide#images